# PEER AND TEACHER PREFERENCE, STUDENT-TEACHER RELATIONSHIPS, STUDENT ETHNICITY, AND PEER VICTIMIZATION IN ELEMENTARY SCHOOL

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We examined the effects of peer preference and teacher preference for students, students' perceived relationship with their teacher and student ethnicity on peer victimization in late elementary school. Participants were students in the third through fifth grades in four public elementary schools in a southern state. Using hierarchical linear modeling, we found that peer and teacher preference for students and student ethnicity each uniquely predicted student-reported peer victimization, controlling for student gender, grade level, and teacher gender and race. Specifically, higher peer and teacher preference were independently related to lower peer victimization in late elementary school, and minority students were more at risk for peer victimization than were White students. Interestingly, examinations of interactions indicated that Hispanic children who reported more positive relationships with teachers were at greater risk of victimization relative to White students. Practical implications are discussed in light of these findings.

Peer victimization refers to a child's experience of being bullied, such as being physically or verbally attacked, or relationally excluded by another child or other children in social interactions (Hawker & Boulton, 2000). Within the peer-to-peer bullying dynamic, the perpetrators (bullies) attack and harass the victims who are relatively powerless (Salmivalli, 2010). Large-scale research with community samples suggests that 20% to 30% of children and adolescents experience peer victimization (Nansel et al., 2001; Storch & Masia-Warner, 2004) and that victimized children face increased risk for problems such as depression, truancy, and low self-esteem (Seeley, Tombari, Bennett, & Dunkle, 2009). Furthermore, victimized children are more likely to develop substance abuse problems and delinquent behavior (Sullivan, Farrell, & Kliewer, 2006) and are more likely to experience academic difficulties, classroom disengagement, and adjustment problems (Buhs, Ladd, & Herald-Brown, 2010).

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Research suggests that children's social status (i.e., peer preference) decreases the likelihood of peer victimization and that unpopular children are at greater risk of being rejected, bullied, or victimized (DeRosier & Thomas, 2003). Teacher preference for students, an important factor in peer dynamics (Farmer, McAuliffe Lines, & Hamm, 2011), has been understudied with regard to its role in peer victimization, however. In addition, students' perceived relationship with their teacher is likely to be relevant to students' peer victimization experience. For example, children who perceive highconflict or detached relationships with teachers are less likely to seek support from teachers and more likely to feel socially incompetent (Pianta & Steinberg, 1992, April) and disconnected from school (Birch & Ladd, 1997). These children may not be able to use teachers as supportive resources to avoid or recover from peer exclusion and victimization. However, student-teacher relationships have largely been assessed using teacher reports (e.g., Rudasill, Reio, Stipanovic, & Taylor, 2010), which may correlate highly with teachers' reports on their student preference. Distinguishing students' perceptions of their relationships with teachers from teachers' preference for students is important for teasing apart the relational predictors of peer victimization. Also, despite the increasingly diverse student population in America, it is not clear how student ethnicity may differentiate students' peer victimization experience, given the inconsistent and limited findings from research examining the role of student ethnicity in peer victimization (Crosnoe, Johnson, & Elder, 2004). Lastly, although the literature encourages interactive models in predicting peer victimization (Gazelle, 2006), few studies have empirically tested the interactions across peer preference, teacher preference, students' perceptions of the student-teacher relationship, and student ethnicity in predicting peer victimization. This study explored the independent and interactive effects of these four factors on student reported peer victimization experience.

#### PEER PREFERENCE AND PEER VICTIMIZATION

As early as 3 years of age, children show particular preferences for some peers over others. By preschool, children start to structure peer groups based on popularity with some children well accepted and liked by peers and others actively ignored or rejected (Hay, Payne, & Chadwick, 2004). Sociometric rating systems have been used for decades to examine children's social status among peers (e.g., Newcomb, Bukowski, & Pattee, 1993). Using such rating systems, researchers show that well-liked children often possess prosocial skills and characteristics such as spontaneous sharing, empathy, and helpfulness (Poorthuis, Thomaes, Denissen, van Aken, & de Castro, 2012). Rejected children tend to display problem behavior that interferes with their social engagement, such as immaturity, hyperactivity, impulsiveness, and deviant behavior (LaFontana & Cillessen, 2002; Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1999). These children are more likely to be victimized by peers (Schwartz et al., 1999) and, as a result, to develop depressive symptoms in adolescence (Lansford et al., 2007; Prinstein & Aikins, 2004). Children who are accepted and preferred by peers, however, are less likely to be victimized and show more positive mental, social, and emotional adjustment (Prinstein & Cillessen, 2003).

## TEACHER PREFERENCE AND PEER VICTIMIZATION

Teachers establish rules and set norms in the classroom by defining classroom culture and providing approval or discouragement of certain behavior (Farmer et al., 2011). Children are capable of accurately perceiving teachers' attitudes and behavior, and such perceptions have been shown to affect children's classroom behavior and social relationships (Wubbels, Brekelmans, & Hooymayers, 1993). Thus, differences in teachers' attitudes and behavior may contribute to varied classroom cultures and norms through which children evaluate themselves and others (Hughes, Cavell, & Wilson, 2001). Additionally, teachers' nonverbal communication, affective tone, and body language can influence children's self-perceptions and preferences for peers (Babad & Taylor, 1992; White

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& Jones, 2000). Chang (2003) found that teachers' aversion to aggression and empathy toward withdrawal enhanced peer rejection of aggressive students but improved the self-perceptions of withdrawn students. Moreover, research has shown that teachers do show preferences for some students over others (Chang et al., 2007; Chang et al., 2004). Teachers tend to prefer students who do well academically, engage in prosocial behavior, and are compliant (Taylor & Trickett, 1989; Wentzel & Asher, 1995). Teachers are also influenced to a small degree by a student's social status with peers. That is, teachers may show less preference for students who are also disliked by peers (Mercer & DeRosier, 2008; Nesdale & Pickering, 2006). Teachers who maintain positive attitudes toward and preferences for rejected students may help protect such children from some aspects of victimization.

Although research has established a link between dislike by peers and victimization, less is known about the relationship between teacher preference and student victimization. Evidence suggests that teacher support may buffer students from internalizing behavior, loneliness, and depression across childhood and adolescence (Mercer & DeRosier, 2008; Pianta & Stuhlman, 2004). However, there remains little research assessing the effect of teacher preference for students on the likelihood of students being victimized by their peers. Understanding the role of teacher preference in peer victimization may inform intervention and prevention efforts against peer victimization.

#### STUDENTS' PERCEIVED RELATIONSHIPS WITH TEACHERS AND PEER VICTIMIZATION

Students' perceived relationships with teachers capture the extent to which they perceive their teachers as accessible and supportive, and themselves as valued by their teachers. Supportive and warm student-teacher relationships are characterized by open communication, teacher involvement, responsiveness, and trust. This positive relationship quality fosters students' perceptions of teachers as dependable, accessible, and supportive, and themselves as competent and worthwhile. In essence, positive student-teacher relationships provide a support system for students' navigation of novel situations and development of social skills within the school context (Bretherton & Munholland, 1999). Positive student-teacher relationships have been linked with task engagement and motivation in school (Connell & Wellborn, 1991), social competence (Pianta & Steinberg, 1992, April), and academic achievement (Birch & Ladd, 1997). Negative and detached student-teacher relationships, however, put children at risk for behavioral and academic problems, such as school drop-out, drinking, smoking, physical violence, and stealing (e.g., Rudasill et al., 2010). Although many of these studies used teacher report for the student-teacher relationship construct, which may correlate highly with teacher preference for students, we focused on student-reported relationships with teachers to examine how this subjective perception of relationships with teachers relates to peer victimization.

### STUDENT ETHNICITY AND PEER VICTIMIZATION

Ethnicity is a relatively understudied factor as it relates to peer victimization. Most existing peer victimization research has focused on predominantly White, middle-class samples (Storch, Phil, Nock, Masia-Warner, & Barlas, 2003). The few studies that have examined ethnicity as a factor in peer victimization are relatively dated and plagued by very small samples (Moran, Smith, Thompson, & Whitney, 1993; Siann, Callaghan, Glissov, Lockhart, & Rawson, 1994). These studies are also inconsistent in their findings, with contradictory evidence about risks for peer victimization for Black and Hispanic students (Crosnoe et al., 2004). Recent demographic trends indicate that more than 50% of students in U.S. public schools are non-White (National Center for Education Statistics, 2015). Given this diversity, it is important to examine the extent to which students' ethnic background may be related to peer victimization.

#### INTERACTION EFFECTS

Peer victimization may occur as a function of interactions between the child and the environment (Gazelle, 2006). Specific child outcomes may also result from the interaction between different aspects of the environment. In our study, the child effects are student-perceived relationships with teachers and student ethnicity. The environment effects are peer preference and teacher preference. Few studies have examined interactions across these four factors. We expected peer preference, teacher preference, students' perceived relationship with their teacher, and student ethnicity to interact in affecting peer victimization based on several sources of evidence.

First, students rejected by peers are not necessarily disliked or rejected by teachers (Wentzel & Asher, 1995), and students liked by both peers and teachers are less likely to be victimized compared with students liked only by peers (Gorman, Kim, & Schimmelbusch, 2002). Discordance between peer and teacher preference may lead to an expectation of highest risk for peer victimization among students disliked by both peers and teachers and lowest risk for peer victimization among students liked by both peers and teachers. Furthermore, we expect students' perceptions of their relationships with teachers to be distinct from teacher's actual preference for the student. Students who reported a lower quality of relationships with teachers and who received low teacher preference would be more likely to report the most peer victimization than other students. We also expect students of color to be more likely to experience peer victimization than White students, and the hypothesized main effects of peer preference, teacher preference, and student-perceived relationships with teachers on peer victimization would differ for students of color, compared with White students.

#### THE PRESENT STUDY

In this study, we explored the differential effects of peer and teacher preference for students, students' perceived relationships with their teachers, and student ethnicity on peer victimization. We also explored possible interactions among these variables in predicting victimization. We hypothesized that higher peer and teacher preferences, as well as higher student-perceived relationships with their teachers, would be associated with a lower peer victimization experience. Furthermore, we hypothesized that being White would be associated with less peer victimization experience than being Black or Hispanic. We also expected that students disliked by both peers and teachers would be at the highest risk for peer victimization compared with children liked by either or both. Students who perceived their relationships with teachers as low quality would also be at the highest risk for peer victimization if they were disliked by either peers or teachers. Lastly, the hypothesized main effect of peer and teacher preference and student-perceived relationship with the teacher on peer victimization would be stronger for White students than for students of color.

Hierarchical linear modeling (HLM) was used to test whether the associations among variables varied both within and across classrooms (Raudenbush & Bryk, 2002). To our knowledge, this is the first study to simultaneously examine the correlates of peer victimization from the perspectives of peers, teachers, and elementary school children.

#### METHOD

## **Participants**

The sample consisted of 1,075 third- through fifth-grade students from four ethnically and socioeconomically diverse public elementary schools in central North Carolina. The present sample was a subset of a larger longitudinal study involving programs to promote prosocial behavior and reduce aggressive behavior problems among elementary school students. Of schools that expressed interest in participating at all levels (i.e., administrators, teachers, and counselors in school all expressed interest), four were selected to provide an ethnically diverse sample of students that

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was representative of the area. The racial distribution of the participating schools (as reported in archival school records) was as follows: White, 44.6%; Black, 28.9%; Hispanic, 14.1%; Asian, 6.4%; and multiple ethnic groups, 4.7%. The data used in the present study were collected prior to implementation of the intervention.

Parents of third, fourth, and fifth graders at each of the four elementary schools were sent informational letters describing the project and outlining participation procedures. Parents provided consent or declined consent and returned the form to the child's teacher. Consent was obtained for 87% of the total pool of students. The present sample consisted of 538 (50.0%) male and 537 (50.0%) female students receiving general education in the public school systems. The racial composition of participating students was as follows: White/European American, 48.1%; Black/African American, 28.7%; Hispanic, 11.0%; Asian, 7.3%; American Indian, 0.4%; and multiracial, 4.5%. The distribution of participating students across grades was roughly equivalent, with 375 (34.9%) third-grade, 365 (33.9%) fourth-grade, and 335 (31.2%) fifth-grade students. There were 125 participating teachers, with 117 (93.6%) female teachers and 8 (6.4%) male teachers. The racial composition of participating teachers was as follows: White/European American, 87.2%; Black/African American, 9.6%; Hispanic, 2.4%; and Asian, 0.8%.

#### Procedure

Student and teacher assessments were conducted during the second semester of the academic year. Pencil-and-paper measures were administered to groups of students in the classroom by trained research assistants. Children completed the sociometric ratings, followed by self-report measures. Teachers completed behavioral ratings on an average of 21 students in a separate room while students completed their questionnaires in class with a research assistant. See DeRosier and Mercer (2007) for a full description of the data collection procedure.

## Measures

Peer Preference. Peer preference was assessed via sociometric ratings in which students rated all other students in their class on the extent to which they considered each child a friend on a scale, from 1 (*Not at all*) to 5 (*A whole lot*) from a list of names of all students in the class. Sociometric ratings are a commonly used method of assessing peer relationships (see Endedijk & Cillessen; 2014). Peer preference (i.e., likability) ratings were averaged across all classmate responses for each child to create a mean, continuous rating of the extent to which each child was liked by peers. Students' class-based sociometric ratings ranged from 1.20 to 4.94, with an average of 3.20. Internal reliability estimates of students' ratings of classmates indicated reasonable, although not overly high, coherence of ratings for each rated student ( $\alpha = .64$ ), which is to be expected, given students' various friendships and social groups within the classroom.

Teacher Preference. Teacher preference was measured using a single item. Teachers responded to the question "How easy is it for you to like this child?" on a 5-point Likert scale (1 = Extremely easy and 5 = Not at all easy) for each student on the roster. This item was recoded, with higher values indicating greater teacher preference for students. The mean teacher preference was 1.82 (SD = .85), with a range of 1 to 5. The significant association found between teacher and peer preference for students (see Table 1) highlights the correspondence in ratings of students and provides evidence of concurrent validity of this measure.

Perceived Relationship with Teacher. Students completed three items assessing their perceived relationship with the teacher. A composite score was created from the three items ("I like my teacher," "I wish I had a different teacher" (reverse scored), and "I get along really well with my teacher").

Table 1
Descriptive Statistics

Variable	Peer Victimization	Perceived Relationship with Teacher	Teacher Preference	Peer Preference
Perceived Relationship with	04			
Teacher				
Teacher Preference	16***	03		
Peer Preference	18***	.16***	.34***	
Mean (SD)	1.87 (.85)	2.97 (.45)	1.82 (1.06)	3.20 (.64)
Black	2.05 (.88)	2.99 (.53)	2.08 (1.20)	3.04 (.62)
White	1.76 (.82)	2.96 (.40)	1.70 (.98)	3.30 (.64)
Hispanic	2.06 (.86)	2.99 (.48)	1.78 (.96)	3.16 (.62)

Note. \*\*\*p< .001

Items were scored on a 4-point scale, from 1 (*Not at all true for me*) to 4 (*Very true for me*). Internal consistency was .78, with a mean of 2.97 and a range of 1.33 to 4.00.

Student-Reported Peer Victimization. Students responded to six items assessing their experiences of victimization on a 4-point scale (1 = Not at all true and 4 = Very true). Sample items included "A kid teased me or called me a mean name," "A kid pushed, kicked, or hit me on purpose," and "Another kid said mean things about me behind my back." Internal reliability estimates for these items was .87. Mean victimization scores were created by averaging across all six items, and higher values corresponded to greater levels of victimization. Although mean victimization scores ranged from 1 to 4, one third (32.9%) of students had average victimization scores below 1.25, suggesting that a large proportion had not recently experienced an incident of peer victimization. Despite this, the distribution of scores was not skewed or kurtotic, with values of .86 and -.36, respectively.

## Analytical Approach

HLM (Raudenbush & Bryk, 2002) was used to accommodate the nested nature of the data (i.e., students within classrooms). Such an approach allowed for the modeling of both individual level (Level 1) and classroom (Level 2) variance in the victimization outcome. Preliminary analyses were conducted to determine the extent to which variability in students' reports of victimization were attributable to differences within or between classrooms. Preliminary analyses were also used to decide whether the intercepts and slopes should be estimated as random or fixed in estimating the effects of the main predictors while accommodating between-classroom variance in the variables of interest.

#### RESULTS

## Descriptive Statistics

Means, standard deviations, and correlations for all variables were computed (see Table 1). Examination of mean differences revealed no overall gender differences in children's reports of victimization, t (896) = -0.25, p = .81. A small but significant relationship was found between grade level and victimization (r = -.09, p < .05), with children in fifth grade (M = 1.70, SD = .78) reporting less victimization than children in third grade (M = 1.90, SD = .85) or fourth (M = 1.87, SD = .86). Peer preference and teacher preference were significantly correlated, and

Table 2
Estimation of Null Models

Fixed Effects	Coefficient	S.E.	t-value
Child-Reported Victimization ( $\gamma_{00}$ )	1.87	.03	54.81**
Random Effects	Variance Component		
Child-Reported Victimization:			
Classroom Level $(\tau_{00})$	.05		
Child Level $(\sigma^2)$	.68		

*Note.* \*\*p < .01.

both were significantly negatively related with student victimization, indicating that students who were less liked by teachers and peers were more likely to be victimized than students who were more preferred by teachers and other students. Interestingly, students' perceived relationship with their teacher was significantly correlated with peer preference but not with teacher preference or peer victimization.

## Multilevel Analysis

Results of the preliminary analyses based on the fully unconditional (null) model indicated sufficient variability at Level 1 and Level 2 to warrant further analyses. The fully unconditional (null) model included only the intercept at each level. Results indicated that approximately 8% of the variability in student-reported victimization was between classrooms, whereas 92% of the variance in student victimization was explained by differences among students within classrooms (see Table 2). Preliminary analyses using a model allowing slopes to vary across Level-2 units did not explain significant unique variance above a model with fixed effects for the Level 2 slopes. This suggests that the effects of student-level variables did not differ by classroom. Thus, the multilevel modeling results were based on the random-intercept fixed-slope models, with slopes of Level-1 variables constrained to be equal across classrooms.

With the random-intercept and fixed-slope approach, a series of multilevel models were tested in a stepwise fashion to determine the amount of student-level and classroom-level variance explained by predictors in a cumulative fashion. Specifically, following the null model, we tested a control model that included only student gender and grade level as Level-1 covariates and teacher gender and race as Level-2 covariates (Model 1 in Table 3). Next, in the main effect model, we added the four main predictors to the control model and tested the effects of peer preference for the student, teacher preference for the student, students' perceived relationship with their teacher, and student ethnicity on peer victimization. When testing the effect of student ethnicity on peer victimization, we included reference-coded variables for designating ethnic group affiliation in the previous model. This reference coding allowed for an examination of the differences in victimization between Black students and White students as well as between Hispanic students and White students. Last, in the interaction model, we added interaction variables between and among the Level-1 main predictors to the main effect model. However, only the interaction between student ethnicity and student-perceived relationships with teachers was found to be significant. We therefore trimmed the interaction variables to retain the interaction variables that reflect the interaction between student ethnicity and student-perceived relationships with teachers. Below are the equations for the final trimmed interaction model (Model 2 in Table 3) with a significant interaction effect.

Level 1: 
$$Y_{ij} = \beta_{0ij} + \beta_{1ij} (Gender) + \beta_{2ij} (Grade) + \beta_{3ij} (Black) + \beta_{4ij} (Hispanic) + \beta_{5ij}$$

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(PeerPreference) + \beta_{6ij} (TeacherPreference) + \beta_{7ij} (Student - Teacher
Relationship) + \beta_{8ij} (Student - Teacher Relationship \times Black) + \beta_{9ij}
(Student - Teacher Relationship \times Hispanic) + r_{ij}
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Level 2: 
$$\beta_{0ij} = \gamma_{00} + \gamma_{01j}$$
 (Teacher Race)  $+ \gamma_{02j}$  (Teacher Gender)  $+ u_{0j}$ 

$$\beta_{1ij} = \gamma_{10}$$

$$\vdots \qquad \vdots$$

$$\beta_{7ii} = \gamma_{70}$$

In Level 1, the intercept,  $\beta_0$  is the predicted victimization of a given student (i.e., student i in classroom j). The peer preference slope,  $\beta_5$ , is the expected relationship between peer preference and victimization for a given student. Similarly,  $\beta_6$  and  $\beta_7$  represent the expected relationship between victimization and teachers' preference for students and students' perceived relationship with their teacher, respectively. The slopes for all other variables,  $\beta_1$  to  $\beta_4$ , indicate the adjusted difference in student victimization as a result of those variables. Lastly, the error term,  $r_{ij}$ , is the unique effect associated with student i in classroom j.

As shown in Table 3, we found that the extent to which students were preferred by peers and teachers was both uniquely and negatively associated with students' reports of victimization such

Table 3 HLM Model with Random Intercept and Fixed Slopes

	Model 1		Model 2	
Fixed Effects	Beta (SE)	t value	Beta (SE)	t value
Teacher-Level Variables				
Race $(\gamma_{01})$	-0.11(.55)	-0.19	0.00 (.08)	0.01
Gender $(\gamma_{02})$	-0.26 (.58)	-0.44	-0.01 (.00)	-0.06
Student-Level Variables				
Intercept $(\gamma_{00})$	2.07 (.09)	23.52***	2.14 (.09)	24.62***
Gender $(\gamma_{10})$	-0.01 (.05)	-0.19	-0.11(.05)	-2.33*
Grade $(\gamma_{20})$	-0.06(.03)	-2.50*	-0.10(.02)	-4.30***
Black-White $(\gamma_{30})$			0.21 (.05)	3.87***
Hispanic-White $(\gamma_{40})$			0.19 (.08)	2.46*
Peer Preference $(\gamma_{50})$			-0.26(.04)	-6.19***
Teacher Preference ( $\gamma_{60}$ )			-0.19(.04)	-5.23***
S-T Relationship ( $\gamma_{70}$ )			0.01 (.06)	0.17
Black-White × S-T Relationship			-0.13(.27)	-0.49
Hispanic-White × S-T Relationship			0.59 (.23)	2.57*
Random Effects	Variance Component	Variance Component		
Between Classroom ( $\tau_{00}$ )	.04	.03		
Within Classroom $(\sigma^2)$	.68	.64		

Note. Random effects reflect estimates of variability in victimization associated with Level 1 ( $\sigma^2$ ) and Level 2 ( $\tau_{00}$ ). S-T Relationship = Student-perceived relationship with teacher.

<sup>\*</sup>*p* < .05 \*\*\**p* < .001.

that lower peer ( $\beta = -.26$ , p < .001) and teacher preference ( $\beta = -.19$ , p < .001) were both related to greater victimization. Students' perceived relationships with teachers ( $\beta = .01$ , p = .17), however, was not found to predict victimization.

We also found significant effects of student ethnicity on peer victimization. That is, students who were Black ( $\beta = .21, p < .001$ ) or Hispanic ( $\beta = .19, p < .05$ ) were found to experience greater peer victimization than White students. Follow-up post hoc comparisons revealed that both Hispanic (M = 2.02) and Black (M = 2.03) students reported significantly greater victimization than White students (M = 1.72). However, reports of victimization of Hispanic students and Black children did not differ significantly.

Further, we found a significant interaction between the ethnicity contrast (Hispanic vs. White) and student-perceived relationships with teachers in predicting peer victimization ( $\beta = .59, p < .05$ ). Decomposition of this interaction showed that for Hispanic students, more positive perceived relationships with teachers were associated with more peer victimization. For White students, however, more positive perceived relationships with teachers were associated with less peer victimization. Counter to our expectations, no other significant interactions were found.

#### DISCUSSION

We explored whether peer preference, teacher preference, students' perceptions of their relationship with their teacher, and student ethnicity were related to peer victimization. We found inverse relationships between students' likeability with peers and teachers and victimization at the hands of peers. Students' perceptions of their relationships with teachers were not related to reports of victimization. In addition, Black and Hispanic students reported more peer victimization than White students. Although we expected interactions among teacher preference, peer preference, and students' perceived relationships with teachers, significant interactive effects were not found. One interaction was found in which student ethnicity (Hispanic vs. White) moderated the relationship between students' perceptions of their relationships with teachers and reported victimization.

As hypothesized, peer preference was a significant predictor of student-reported peer victimization. Children who were well liked by peers were less likely to experience victimization than students who were more disliked by peers. Although other work has uncovered protective effects of peer preference during adolescence (e.g., Prinstein & Cillessen, 2003), our study highlights that by late elementary school, peer preference is an influential factor that affects student victimization. Prevention and intervention programs designed to promote social skill development for students at risk for peer rejection and victimization are important for combating student victimization (Leadbeater & Hoglund, 2006).

Going beyond the peer dynamics in explaining victimization among peers, we found that teacher preference was related to students' victimization experiences. Research shows that teachers differ in preference for students and students who are well behaved, prosocial, and academically successful are more likely to win teachers' favor than those who are not (Wentzel & Asher, 1995). However, students who have behavioral, social, and academic difficulties are often the ones who would most benefit from positive support and feedback from teachers. Although our results preclude the ability to infer causation, the relation between teacher preference and student victimization suggests that teachers' nonpreference for students was related to students' risk for peer victimization, whereas favorable feelings toward a student were related to less peer victimization. Worth noting is that the effect of teacher preference was independent of the students' likability with peers, although teacher preference and peer preference were related (Mercer & DeRosier, 2008; Nesdale & Pickering, 2006).

Some studies suggest that teachers show more positive support for students of the same race and especially for students who come from low-income families (Dee, 2005). We controlled for teacher race and gender as Level-2 variables in the analysis. Given that, our results indicate that the

relationship between teacher preference and peer victimization exists above and beyond teachers' potential preference for students on the basis of teacher and student gender and race documented in the literature (Dee, 2005). This may suggest that teacher preference plays a significant role in protecting students from victimization regardless of students' standing among peers. This finding highlights the need to understand students' social status within context (Chang et al., 2007; Hartup, 1989). Solely focusing on peer acceptance would have failed to recognize teacher preference as a potentially important contextual variable that may buffer against peer victimization for socially isolated or rejected students. It is worth noting that although teacher preference was significantly correlated with peer preference, teacher preference was not correlated with students' perceived relationship with their teacher. This indicates a distinct difference between teachers' subjective preference for students and students' subjective perceptions of their relationship with their teacher.

However, student-perceived relationships with teachers did not predict peer victimization, given research suggests that a positive student-teacher relationship plays a protective role in students' general school functioning. For example, students who perceived themselves to have positive relationships with teachers showed competency in peer interactions (Howes, Phillips, & Whitebook, 1992), whereas children who perceived their relationship with teachers as combative or detached tended to feel socially incompetent, reluctant to seek support from teachers, and academically disengaged (Birch & Ladd, 1997; Pianta & Steinberg, 1992, April). Nevertheless, Reavis, Keane, and Calkins (2010) examined the trajectories of student peer victimization in early elementary school and found that student-teacher relationships did not predict either the initial level or change in student victimization. Our descriptive analysis also suggested a lack of correlation between the two constructs. Further investigation in this direction should help elucidate the role of student-perceived relationships with teachers in their victimization.

Differences in victimization as a function of student ethnicity has received relatively little attention in the literature, as most research has focused on predominantly White, middle-class samples (Storch et al., 2003), and the few studies that have examined this topic have generated inconsistent findings (Crosnoe, et al., 2004). Some studies suggest higher rates of peer victimization for Black students, whereas other studies find few differences between Blacks and other groups on the likelihood of peer victimization (Nansel et al., 2001; Siann et al., 1994). Some researchers suggest that Hispanic students are at relatively low risk for school victimization (Juvonen, Graham, & Schuster, 2003), whereas others have reported that Hispanic students may face higher risk (Devoe, et al. 2004; Peguero, 2009). Given the increasing diversity among the student population, it is important to understand how victimization experiences may vary across ethnic groups within the classroom context.

As hypothesized, both Black and Hispanic students reported greater peer victimization than White students. The higher level of peer victimization for Black versus White students was not contingent on other variables of interest in this study. This main effect finding contributes to the literature by providing additional evidence that Black students are more at risk for peer victimization than White students in our ethnically diverse sample of elementary students.

For Hispanic versus White students, their level of peer victimization was contingent on their perceived relationship with their teacher. Specifically, more positive relationships with teachers were associated with greater peer victimization among Hispanic students. But more positive relationships with teachers were associated with lower peer victimization among White students, whose peer victimization decreased as they perceived more positive relationships with teachers. Because of the lack of research in examining the relationship between students' perceived relationships with teachers and peer victimization, this interaction finding awaits further replication. Nevertheless, based on

Bronfenbrenner's (1979) ecological model of development, we may interpret individual behavior in relation to the different layers of ecological systems that one is embedded in, such as the school (microsystem), the family (microsystem), or the cultural expectations (macrosystem). We speculate that perhaps Hispanic students who experience greater peer victimization may seek support from teachers to buffer themselves from the negative feedback received from other students, which may enhance their perceived relationships with teachers. However, because our study was cross sectional, we were not able to test the temporal relationship to specify the direction of the relationship and had little evidence as to why such a process may exist among Hispanic students and not students of other ethnicities. To this point, it is important to examine the family and cultural characteristics of those Hispanic students at higher risk for peer victimization, given the evidence about dominant family influences in children's social maladaptation regardless of student—teacher relationships (Reavis et al., 2010). As we do not have detailed cultural descriptive information or family interaction variables in our study, additional research on the interplay of family and cultural practices and peer victimization is warranted.

#### Limitations

The peer victimization measure in our study is an observed variable based on students' self-report and therefore assesses students' perceived victimization. Future study may extend this research by examining peer victimization as reported by others or as a latent variable based on the report from multiple reporters and compare whether the findings based on other-reported scores or those based on multiple reporters' scores are consistent or divergent. Also, we were not able to examine some important factors due to the unavailability of such data, such as family socioeconomic status and cultural interpretations of peer victimization. Future studies may be conducted to gain greater understanding of the roles of these factors in students' victimization experiences, especially for students of color. Lastly, we were restricted by the lack of school-level statistics regarding the percentages of students of various ethnic groups for each school in our sample. For future research, it is important to collect such data so as to tease apart the effect due to having a membership in a specific ethnic minority group versus being a statistical ethnic minority within a school on peer victimization.

#### **Implications**

We contributed to the literature by identifying teacher, peer, and student effects on peer victimization in the late elementary school years. These findings have several practical implications. First, teachers' preference is an important protective factor in students' victimization. It is important to encourage teachers to show positive attitudes and behavior toward all students, particularly those who may be at risk for peer difficulties, to protect them from further problems, including victimization. Second, bullying prevention programs addressing ways to build healthy and adaptive peer relationships are valuable for all children, but may be particularly important for students in third to fifth grades, a period during which social value and peer preference are already salient and influential factors in peer victimization. Given that peer difficulties in adolescence are a major problem that interferes with school success, such preventative efforts at an earlier age may reduce later peer victimization. Lastly, our findings regarding greater victimization among minority students indicates the need to develop culturally sensitive intervention or prevention programs that contribute to positive school environments for all students. Focusing on social acceptance, respecting cultural differences, and building positive peer relationships are examples of implications highlighted by the present study. These school-based efforts can reduce the likelihood of peer

victimization for students while underscoring the importance of relationships between teachers and students.

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